# Two new *Pterodectes* species form passeriform birds (Acarina: Proctophyllodidae).

by

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### Pterodectes delicatulus n.sp.

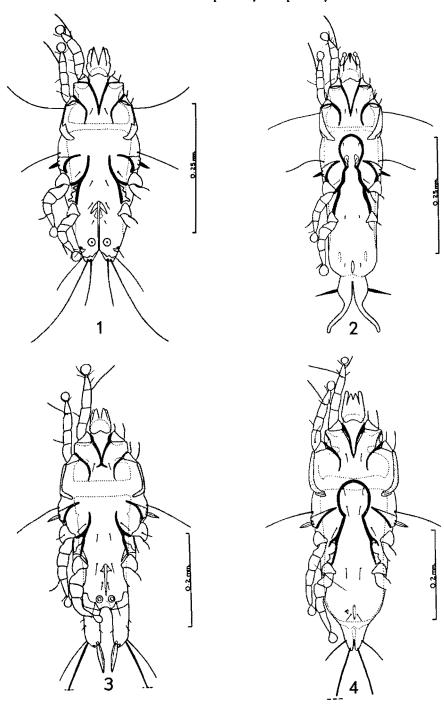
This species is based on 16 & &, 8 & & and 8 nymphs from the grey-headed sparrow, Passer grisea (Vieill.), Marinqua, Mozambique, leg. W. Büttiker, 23.VI.50. A further 5 &, 3 & and 13 N were collected from the same host near the junction of the Sabi and Lundi Rivers, S. Rhodesia, leg W. Büttiker, 4.VI.50.

P. delicatulus resembles P. rutilus Robin, 1868 (= P. rhodesiensis Till, 1954; syn. nov.), differing from this latter species in having a broader, blade-like lateral seta in front of leg III, and a slightly longer penis.

Male (Fig. 1): The holotype measures  $420\,\mu$  in length and  $158\,\mu$  in breadth at its widest part. In the paratypes the length varies from 385 to  $411\,\mu$  and the greatest breadth from 140 to  $149\,\mu$ . The dorsal surface of the body is covered by a propodosomal shield which bears a pair of very long  $(120\,\mu)$  hairs, and a hysterosomal shield, the hairs of which are very difficult to distinguish. The tip of the abdomen is divided into two lobes of which both inner and outer margins are heavily sclerotised. Each lobe terminates in 3 hairs measuring, from the innermost to the outermost,  $80\,\mu$ ,  $180\,\mu$  and  $70\,\mu$  respectively. A fourth hair is situated on a small plate on the ventro-lateral surface of the lobe, posterior to the anal sucker. Behind the second pair of legs there is an antero-lateral plate, visible on the ventral surface only. On the ventro-lateral margin of the body in front of leg 3 is a long  $(75\,\mu)$  slender, and a short  $(22\,\mu)$ , broad, blade-like hair. An additional 5 pairs of very fine

#### EXPLANATIONS OF FIGURES

- Pterodectes delicatulus n.sp.
   Ventral surface of male (dorsal shields dotted).
- Pterodectes delicatulus n.sp.
   Ventral surface of female (dorsal shields dotted).
- Pterodectes buphagi n.sp.
   Ventral surface of male (dorsal shields dotted).
- Pterodectes buphagi n.sp.
   Ventral surface of female (dorsal shields dotted).



hairs can be distinguished on the venter. The first pair of apodemes form a sharply pointed V. The penis is slender, about 96  $\mu$  long, reaching beyond the anal suckers to the point of bifurcation of the abdomen. The anal suckers are separated by a distance approximately equal to their diameter.

Female (Fig. 2): The body length varies from 534 to  $569 \mu$  and the greatest width from 140 to  $176 \mu$ . The dorsal plates covering the abdominal lobes are connected anteriorly in some specimens and separate in others. Each lobe terminates in an appendage measuring about  $75 \mu$  in length, and bears a lateral dagger-like bristle measuring 52—56  $\mu$  in length. Other features are the same as in the male.

Nymphs: The 8 nymphs have an average length of  $503 \,\mu$  (438—543), and greatest width of  $160 \,\mu$  (131—184  $\mu$ ). The propodosomal plate extends to between the 1st and 2nd pairs of legs, and the long propodosomal hairs are situated on small platelets behind the main plate. The hysterosomal plate is very small, covering the abdominal lobes and an almost equal area anterior to the lobes. Each lobe bears a long (110  $\mu$ ) slender, terminal hair and a shorter (46  $\mu$ ), stiff lateral bristle. The skin between the plates is strongly folded.

# Pterodectes buphagi n. sp.

This species is based on 6 & and 8 & collected from the Red-billed Oxpecker, Buphagus erythrorhynchus (Stanley), by Dr. W. Büttiker, at the junction of the Sabi and Lundi Rivers, S. Rhodesia 5.VI.50.

P. buphagi is distinguishable from other known species of the genus Pterodectes by its widely separated, rectangular lobes each of which terminates in a blade-like bristle and two seta-like hairs, by its relatively short penis which extends as far as the anal suckers, and in having the anterior apodenes fused at their posterior tips, and produced into short postero-lateral processes.

Male (Fig. 3): Body length  $480-525~\mu$  (525  $\mu$  in holotype), greatest width  $166-185~\mu$  (185  $\mu$  in holotype). The propodosomal shield measures  $135~\mu$  in length and breadth. In the holotype there is a more weakly sclerotised, rectangular strip on each side surrounding the 2 dorsal hairs, whilst in some other specimens this portion of the plate appears to have been excised, with the pair of long hairs consequently situated on soft skin, and the short accessory hairs on the margin of the plate. The hysterosomal plate in about  $130~\mu$  wide at its anterior margin and tapers very gradually, reaching a width of  $100~\mu$  at the level of the anal suckers. The posterior margin of the body is very deeply excised, resulting in the formation of two broad, rectangular lobes. Each lobe terminates in an inner blade-like bristle  $65-70~\mu$  long, a long, basally thickened median hair and a shorter, slender outer hair. There are 3 very fine additional hairs, one on the inner margin of each lobe, one situated dorso-laterally, and one a little further forward on the lateral margin.

On the ventral surface the first pair of apodemes have fused to form

a V, the base of the V having short, postero-laterally directed processes. The penis is  $65-70~\mu$  long and just reaches the anal suckers. A pair of almost triangular-shaped plates lie postero-lateral to the suckers. Six pairs of fine hairs can be distinguished on the venter. The short, dagger-like bristle in front of leg III is about  $30~\mu$  long and  $8~\mu$  wide.

Female (Fig. 4): Body length 585—630  $\mu$ , greatest width 195—220  $\mu$ . Propodosomal plate slightly broader than long (160  $\mu$  × 166  $\mu$ ), with the long dorsal hair situated on soft skin and the short accessory hair on the margin of the plate. Hysterosomal plate about 325  $\mu$  long, 165  $\mu$  wide at anterior margin, tapering gradually to about 130  $\mu$  at level of anus. The abdominal lobes are small and conical, each bearing a long terminal hair and a shorter (60  $\mu$ ) lateral hair.

On the ventral surface the first pair of apodemes are joined to form a V without any lateral projections. Six pairs of hairs are situated on the venter as indicated in the drawing.

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#### REFERENCE

TILL, W. M., (1954) Five new feather mites of the genus Pterodectes (Acarina: Analgesidae). — Mozambique doc. trim. no. 79, pp. 85-99.